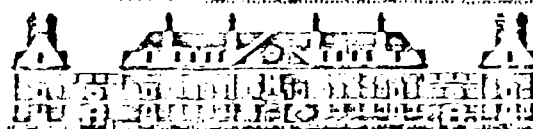


STATE OF ILLINOIS  
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DEAN WILLIAM L. EVERITT  
DEAN JOHN C. GUYON

REFERENCE 4  
SITE NAME Carlstrom Landfill  
SITE ID ILP 980497721



## ILLINOIS STATE GEOLOGICAL SURVEY

NATURAL RESOURCES BUILDING, URBANA, ILLINOIS 61801

TELEPHONE 217 344-1481

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ENFORCEMENT PROGRAMS

Jack A. Simon, CHIEF

APR 07 1978

Environmental Protection Agency

Box I  
Warrenville, Illinois 60555  
(312) 393-1466  
April 4, 1978

Mr. R.D. LaScala  
Enforcement Programs  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62706

Dear Mr. LaScala:

This is in response to your request of March 14, 1978, for a description of the hydrogeology in the vicinity of a landfill site located in the W $\frac{1}{2}$  of the SW $\frac{1}{4}$  of Section 16, T. 35 N., R. 10 E., in Will County.

In February of 1971, Dr. George Hughes, who at that time was in charge of this office, responded to a request from the Aurora EPA office for an evaluation of this site. As the only copy in our files of his report is too poor to reproduce, I have excerpted pertinent parts of it for you, as follows:

"This site is located in a quarry cut into the north side of the valley of the Des Plaines River between Interstate Highway 80 and the Chicago, Rock Island and Pacific Railroad. At the time of the visit, the site was partially filled with industrial waste. Approximately 30 feet of dolomite was exposed on the northwest wall of the quarry, and, according to our maps of this area, this dolomite is a part of the Silurian dolomite aquifer. The base of the disposal site was, for the most part, covered; however, ponds were present to the south which suggests that the top of the zone of saturation is within 10' feet of the surface in the present fill.

"The Geological Survey has records of approximately 20 shallow dolomite wells in this vicinity. These records are not complete, and we do not know if these wells are still being used, or if new wells have been drilled. According to Mr. Robert Sasman, of the Illinois State Water Survey, there are no major industrial wells producing from the shallow dolomite in this area. Under natural conditions, ground-water movement from this site would be towards the southeast into the Des Plaines River; however, this could have been modified by pumping.

EPA Region 5 Records Ctr.



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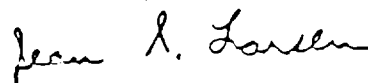
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ecology and environment

"If leachate is produced from refuse buried at this site, it will move with the ground water into the surrounding fractured dolomite. This dolomite is not a major aquifer in the vicinity of this site, however, dissolved solids may move rapidly through these materials with little attenuation, and it is possible that there are shallow wells present."

I have re-examined our files to determine if additional wells have been drilled within one-half mile of this landfill since Dr. Hughes prepared this report in 1971, but, have found that none have been added to our records, so I have no additional data that would in any way alter Dr. Hughes' original evaluation.

Yours truly,



Jean I. Larsen  
Associate Geologist  
Hydrogeology and Geophysics Section  
Northeastern Illinois Office

JIL/kv